



# POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 243

October 20, 1961

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### SPECIAL NOTE

This report is intended for the information and administrative use of those involved in the investigation and control of poliomyelitis and polio-like diseases. It presents a summary of provisional information reported to CDC from State Health Departments, Virology Laboratories, Epidemic Intelligence Service Officers, and other pertinent sources. Since much of the information is preliminary in nature, confirmation and final interpretation should be determined in consultation with the original investigators prior to any further use of the material.

SUMMARY

There has been a sharp drop in the number of poliomyelitis cases reported for the current week ending October 14. A total of 35 cases, 20 paralytic, were reported compared to the 68 cases, including 45 paralytic, which were reported during the previous week.

The decrease in cases is evident throughout the nation. Only one additional paralytic case has occurred in Newberry County, South Carolina and no new paralytic cases have occurred in Windsor County, Vermont or adjoining Sullivan County, New Hampshire. Narrative reports are included from South Carolina, New York and Pennsylvania.

A preliminary report of poliovirus isolations from 1961 cases of poliomyelitis is presented in Section 3. Also included is a current summary of enterovirus isolations in Section 5.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

A total of 35 cases, 20 paralytic, was reported for the 41st week of 1961, ending October 14. This represents a sharp decrease compared to the 68 cases, including 45 paralytic, which were reported during the previous week. (See Figure 1.) During the corresponding week in 1960, 122 cases, including 78 paralytic, were reported.

The figure on the opposite page depicts attack rates for total cases of poliomyelitis reported from January through September for each year since 1912. The current year, 1961, is the lowest year on record followed by 1938, 1960, 1922, 1920 and 1914 in that order.

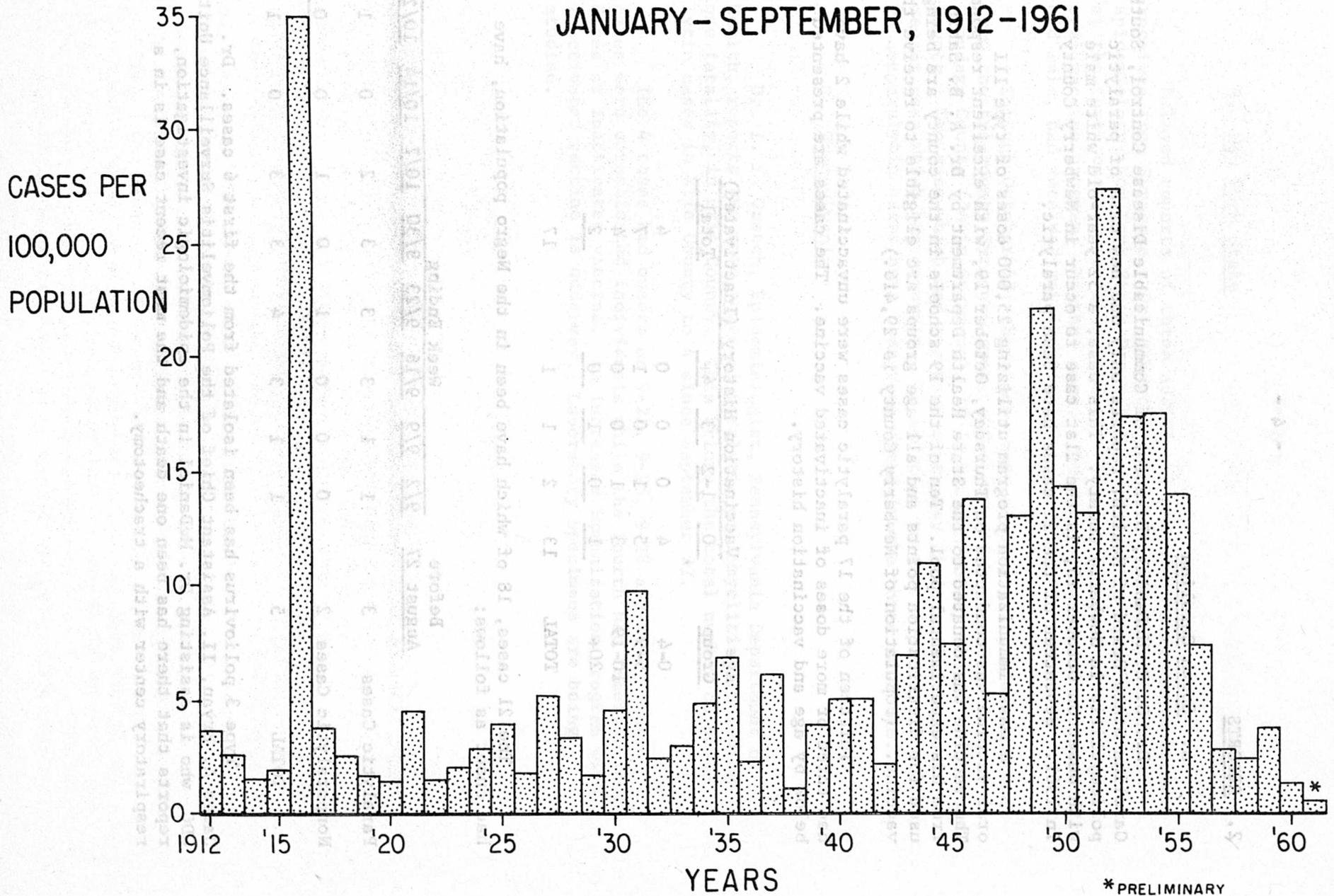
The low incidence during 1961 compared to the past four years is shown in the table below. The number of paralytic cases through the 41st week in 1961 is only 37 percent of the number reported last year during the comparable period.

POLIO (CUMULATED WEEKLY) THROUGH THE 41st WEEK FOR FIVE YEARS

	<u>1961</u>	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>
Paralytic	654	1752	4515	2156	1777
Total	1020	2840	6956	4454	5273

The current week's decrease in cases is evident throughout the nation. (See Table 1). Only New York, California and Pennsylvania reported as many as three paralytic cases. The five cases reported from Ohio are well scattered throughout the State.

# INCIDENCE OF POLIOMYELITIS IN THE UNITED STATES JANUARY - SEPTEMBER, 1912-1961



2. REPORTS

A. South Carolina

Dr. G. E. McDaniel, Director of Communicable Disease Control, South Carolina State Board of Health, reports only one new case of paralytic poliomyelitis in Newberry County. This case, a 32 year-old white male with onset on October 16, is the 21st case to occur in Newberry County in 1961. Seventeen of the 21 cases have been paralytic.

A mass immunization program utilizing 25,000 doses of type III oral vaccine was conducted on Thursday, October 19, with excellent response. The vaccine was donated to the State Health Department by Dr. A. B. Sabin from his experimental pool. Ten of the 19 schools in the county are being used for distribution points and all age groups are eligible to receive the vaccine. (Population of Newberry County is 29,416.)

Thirteen of the 17 paralytic cases were unvaccinated while 2 have had three or more doses of inactivated vaccine. The cases are presented below by age and vaccination history.

Age Group	Vaccination History (Inactivated)				Total
	0	1-2	3	4+	
0-4	4	0	0	0	4
5-9	5	1	0	1	7
10-19	3	1	0	0	4
20+	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>2</u>
TOTAL	13	2	1	1	17

The 21 cases, 18 of which have been in the Negro population, have had onset as follows:

	Before August 27	Week Ending							
		9/2	9/9	9/16	9/23	9/30	10/7	10/14	10/21
Paralytic Cases	3	1	1	3	3	3	2	0	1
Nonparalytic Cases	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>
TOTAL	5	1	1	3	4	3	3	0	1

Type 3 poliovirus has been isolated from the first 6 cases. Dr. James A. Bryan, II, Assistant Chief of the Poliomyelitis Surveillance Unit, CDC, who is assisting Dr. McDaniel in the epidemiologic investigation, reports that there has been one death and the most recent case is in a respiratory center with a tracheotomy.



3. 1961 POLIOMYELITIS REPORTED TO PSU

Through October 14, there have been 758 cases of poliomyelitis with onset in 1961 submitted on individual case forms to the Poliomyelitis Surveillance Unit. Of the 758 cases, 546 (72 percent) are paralytic, 183 nonparalytic and 29 unspecified as to paralytic status. These cases are presented below in Table 3 by paralytic status, age group and vaccination history.

Table 3

POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP AND VACCINATION HISTORY REPORTED ON PSU FORMS (Through October 14, 1961)

Age Group	Paralytic						TOTAL	Percent
	Doses of Vaccine							
	0	1	2	3	4+	Unk		
0-4	125	21	18	23	17	13	217	39.7
5-9	27	8	9	27	27	5	103	18.9
10-14	19	5	7	16	18	3	68	12.5
15-19	10	0	6	11	3	1	31	5.7
20-29	39	3	4	10	3	1	60	11.0
30-39	29	5	2	2	3	4	45	8.2
40+	17	0	0	1	1	3	22	4.0
<b>TOTAL</b>	<b>266</b>	<b>42</b>	<b>46</b>	<b>90</b>	<b>72</b>	<b>30</b>	<b>546</b>	<b>100.0</b>
<b>PERCENT</b>								
<b>DOSES</b>	<b>51.6</b>	<b>8.1</b>	<b>8.9</b>	<b>17.4</b>	<b>14.0</b>	<b>-</b>	<b>100.0</b>	

Age Group	Nonparalytic						TOTAL	Percent
	Doses of Vaccine							
	0	1	2	3	4+	Unk		
0-4	15	1	7	7	2	3	35	19.1
5-9	9	0	4	14	16	3	46	25.1
10-14	2	3	6	12	14	4	41	22.4
15-19	2	0	4	5	4	0	15	8.2
20-29	6	0	4	9	8	3	30	16.4
30-39	9	0	0	4	0	1	14	7.7
40+	0	0	0	0	2	0	2	1.1
<b>TOTAL</b>	<b>43</b>	<b>4</b>	<b>25</b>	<b>51</b>	<b>46</b>	<b>14</b>	<b>183</b>	<b>100.0</b>
<b>PERCENT</b>								
<b>DOSES</b>	<b>25.4</b>	<b>2.4</b>	<b>14.8</b>	<b>30.2</b>	<b>27.2</b>	<b>-</b>	<b>100.0</b>	

Preliminary data regarding the cases of poliomyelitis reported to PSU show the number of isolations of type 1 and type 3 poliovirus to be approximately equal. Of 149 poliovirus isolations reported, 76 were type 3 and 72 were type 1. There has been one type 2 isolation. The isolations are shown on the following page by state.

Louisiana and New York account for the majority of the type 1 isolations. The Louisiana isolations largely represent cases from the New Orleans area and the tri-county outbreak in Upstate New York has been responsible for most type 1 isolations in that State. Three-fifths of the type 3 isolations are from five states: Maryland, Georgia, South Carolina, Pennsylvania and Washington.

POLIOVIRUS ISOLATIONS BY STATE\*

<u>State</u>	<u>Type I</u>	<u>Type II</u>	<u>Type III</u>	<u>TOTAL</u>
Alabama	-	-	5	5
California	6	-	3	9
Connecticut	2	-	-	2
D. C.	-	-	3	3
Florida	1	-	2	3
Georgia	1	-	9	10
Hawaii	2	-	-	2
Idaho	1	1	2	4
Indiana	2	-	-	2
Louisiana	22	-	6	28
Maryland	-	-	14	14
Minnesota	1	-	1	2
Missouri	1	-	-	1
New Jersey	2	-	3	5
New York	18	-	-	18
Ohio	2	-	-	2
Oregon	1	-	1	2
Pennsylvania	3	-	7	10
South Carolina	-	-	8	8
Tennessee	-	-	2	2
Texas	1	-	-	1
Utah	-	-	1	1
Vermont	3	-	-	3
Virginia	-	-	2	2
Washington	1	-	7	8
Wisconsin	2	-	-	2
<b>TOTAL</b>	<b>72</b>	<b>1</b>	<b>76</b>	<b>149</b>
<b>PERCENT</b>	<b>48.3</b>	<b>0.7</b>	<b>51.0</b>	<b>100.0</b>

\* From cases reported to PSU through October 14.

4. ROUTINE POLIOMYELITIS SURVEILLANCE

A. Cases With Onset Within 30 Days of Vaccination (Inactivated)

No additional cases of poliomyelitis with 30 days of receiving inactivated vaccine (IPV) have been reported to the Poliomyelitis Surveillance Unit during the past week ending October 14. Thus, the 1961 total remains at 15 cases, of which 11 are paralytic (two correlated).

B. Cases With Onset Within 30 Days of Vaccination (Oral)

No additional cases of poliomyelitis within 30 days of receiving oral vaccine (OPV) have been reported to the Poliomyelitis Surveillance Unit during the past week ending October 14. Thus, the 1961 total remains at 26 cases, of which 21 are paralytic.

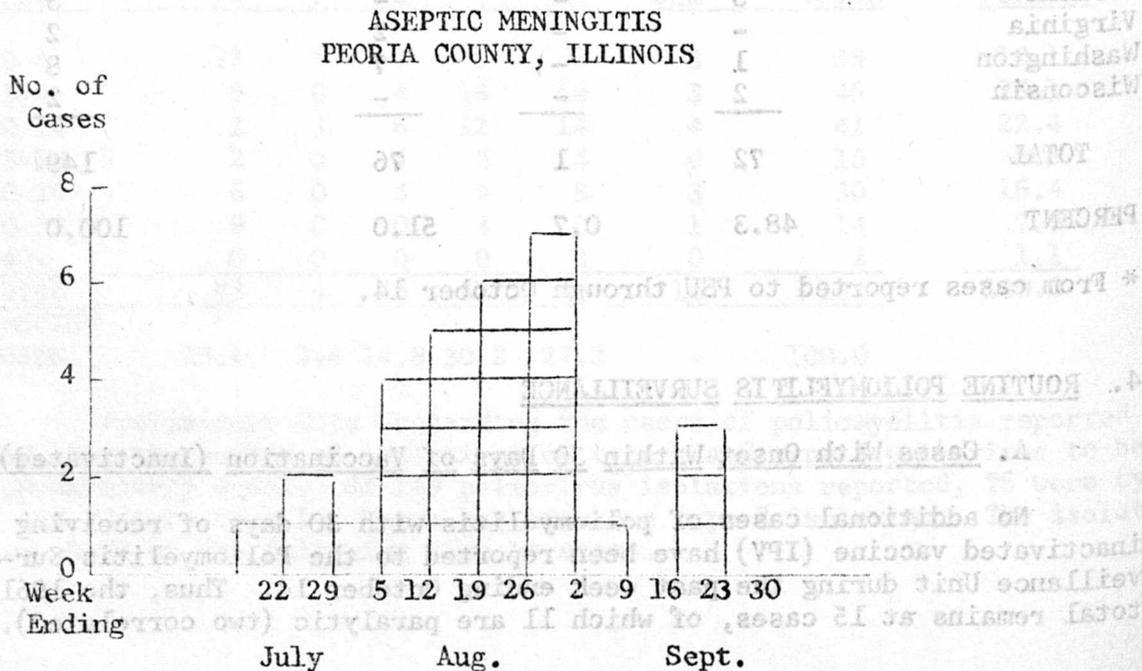
5. ENTEROVIRUS SURVEILLANCE

A total of 563 nonpolio enterovirus isolates has been reported to the Poliomyelitis Surveillance Unit through October 14. Thirty-three States and the District of Columbia have accounted for these as shown in Table 5. Coxsackie B-5 makes up over 50 percent of total isolates reported.

Dr. Norman J. Rose, Chief, Bureau of Epidemiology, Illinois Department of Public Health, reports a total of 34 cases of aseptic meningitis occurring in Peoria County. Of these, 30 have had onset since July 21. Thus far, there have been three isolations of Coxsackie B-5, one ECHO 6 and one ECHO 7. A majority of the cases have occurred in females as follows:

<u>AGE GROUP</u>	<u>MALE</u>	<u>FEMALE</u>	<u>TOTAL</u>
0-4	3	4	7
5-9	1	7	8
10-14	2	4	6
15-19	1	3	4
20-29	2	5	7
30+	2	0	2
<b>Total</b>	<b>11</b>	<b>23</b>	<b>34</b>

The 30 cases with onset since July 21 are shown below by week of onset.



No other outbreaks or epidemics have been reported. Reports of additional B-5 isolates in Minnesota and Pennsylvania have been received, but no localization is evident. ECHO 11 has also been isolated frequently in Minnesota.

Table 5

Non-Polio Enterovirus Isolations from 1961 Specimens

State	ECHO*	Coxsackie				Total	Reported By
		B-2	B-4	B-5	Other and Unsp.		
Alabama	1	-	-	2	3	6	W. Smith & T. Hosty
California	1	1	-	-	1	3	E. Lennette
Colorado	3	-	-	2	-	5	C. Mollohan
Connecticut	1	-	19	11	1	32	G. D. Hsiung, G. Borman & J. Hart
D.C.	-	-	-	-	1	1	W. Wooldridge
Florida	1	-	-	-	-	1	J. Bond
Georgia	-	-	4	-	-	4	W. Murphy
Hawaii	4	-	1	-	8	13	K. Wilcox
Idaho	-	-	-	3	-	3	D. Brack
Illinois	20	3	-	28	3	54	H. Shaughnessy
Kansas	2	-	-	17	2	21	C. Hunter
Kentucky	1	-	-	-	-	1	CDC Virus Reference Unit
Louisiana	1	-	2	-	-	3	J. Bruce & G. Hauser
Maryland	2	-	1	22	-	25	C. Perry & C. Silverman
Mass.	-	-	-	14	-	14	R. MacCready & T. Chang
Minnesota	47	11	2	32	1	93	H. Bauer
Miss.	-	-	-	-	1	1	CDC Virus Reference Unit
Montana	-	-	-	3	-	3	M. Soules
N. H.	-	1	-	-	-	1	R. Miliner
N. J.	3	-	7	33	-	42	M. Goldfield & W. Dougherty
N. Y.	-	-	4	4	2	10	R. Albrecht
N. C.	5	-	2	-	1	8	L. Maddry
Ohio	2	-	1	7	9	19	L. Ey
Oklahoma	-	-	-	4	1	5	F. Hassler
Oregon	-	-	-	6	-	6	G. Brandon & M. Skinner
Pennsylvania	-	-	1	34	-	35	K. Humeler & I. Gratch
Rhode Island	-	-	-	6	-	6	CDC Virus Reference Unit

(Continued on next page)

Non-Polio Enterovirus Isolations from 1961 Specimens (Continued)

State	ECHO*	Coxsackie			Other and Unsp.	Total	Reported by
		B-2	B-4	B-5			
S. C.	-	-	1	-	-	1	G. McDaniel
Tennessee	-	2	5	4	-	11	G. Cameron & C. Tucker
Texas	13	3	-	2	1	19	G. Irons
Utah	-	1	-	16	-	17	R. Fraser & A. Jenkins
Virginia	-	-	-	27	-	27	W. Skinner
Washington	-	54	-	6	-	60	K. Berquist & W. Giedt
Wisconsin	5	-	-	7	1	13	A. Evans
TOTAL	112	76	49	290	36	563	

\* Specific types include twelve ECHO 9 in Texas, one in New Jersey and one in Louisiana; three ECHO 19 in Colorado, one in California and one in Kansas; 41 ECHO 11 in Minnesota; five ECHO 10 in Illinois; 4 ECHO 1 in North Carolina.

(This report was prepared by Mr. Leo Morris, Statistician, of the Poliomyelitis and Polio-like Diseases Surveillance Unit, with the assistance of Statistics Section, CDC.)

FIGURE 1

# CURRENT U.S. POLIO INCIDENCE COMPARED WITH YEARS 1955 -1960, April - December, by week

PROVISIONAL DATA SUPPLIED BY NATIONAL OFFICE OF VITAL STATISTICS  
 AND COMMUNICABLE DISEASE CENTER

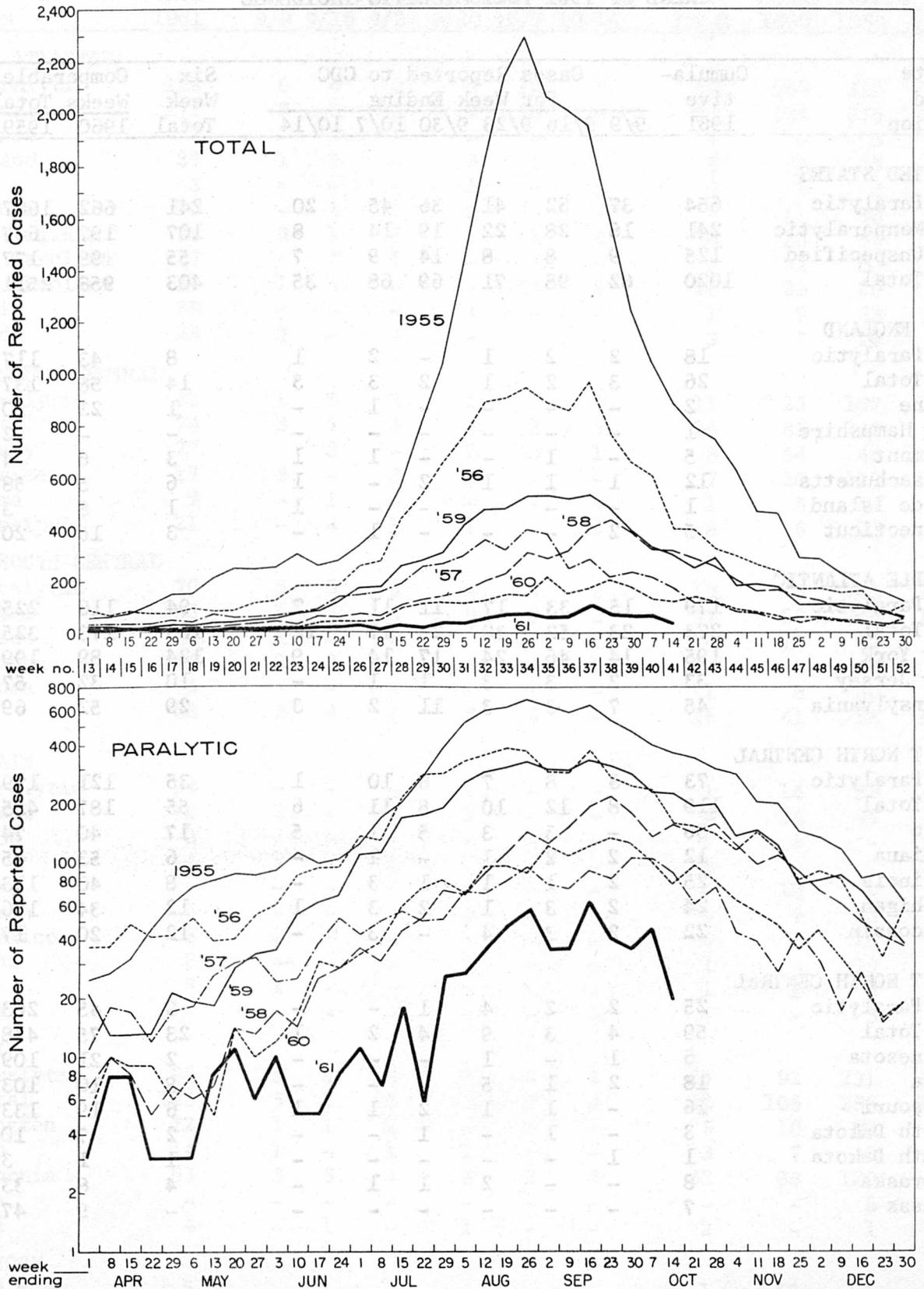


Table 1  
TREND OF 1961 POLIOMYELITIS INCIDENCE

State and Region	Cumulative 1961	Cases Reported to CDC For Week Ending						Six Week Total	Comparable Six Weeks Totals in		
		9/9	9/16	9/23	9/30	10/7	10/14		1960	1959	1958
<b>UNITED STATES</b>											
Paralytic	654	37	62	41	36	45	20	241	662	1687	1048
Nonparalytic	241	16	28	22	19	14	8	107	197	647	822
Unspecified	125	9	8	8	14	9	7	55	99	177	303
Total	1020	62	98	71	69	68	35	403	958	2511	2173
<b>NEW ENGLAND</b>											
Paralytic	18	2	2	1	-	2	1	8	43	117	24
Total	26	3	2	1	2	3	3	14	58	137	31
Maine	2	-	-	-	-	1	-	1	23	50	-
New Hampshire	1	-	-	-	-	-	-	-	-	2	-
Vermont	5	-	1	-	-	1	1	3	6	4	4
Massachusetts	12	1	1	1	2	-	1	6	5	58	13
Rhode Island	1	-	-	-	-	-	1	1	8	3	1
Connecticut	5	2	-	-	-	1	-	3	16	20	13
<b>MIDDLE ATLANTIC</b>											
Paralytic	179	15	33	17	11	11	7	94	116	225	154
Total	273	23	52	30	29	17	12	163	173	325	295
New York	195	14	46	24	17	14	9	124	89	199	107
New Jersey	33	2	3	3	1	1	-	10	32	57	138
Pennsylvania	45	7	3	3	11	2	3	29	52	69	50
<b>EAST NORTH CENTRAL</b>											
Paralytic	73	3	8	7	6	10	1	35	121	179	365
Total	119	8	12	10	8	11	6	55	187	455	1038
Ohio	36	-	3	3	5	1	5	17	40	74	178
Indiana	12	2	2	1	-	1	-	6	53	45	47
Illinois	25	2	1	1	1	3	-	8	40	123	118
Michigan	24	2	3	1	2	3	1	12	34	196	675
Wisconsin	22	2	3	4	-	3	-	12	20	17	20
<b>WEST NORTH CENTRAL</b>											
Paralytic	25	2	2	4	1	-	-	9	45	263	76
Total	59	4	3	9	4	2	1	23	75	438	156
Minnesota	6	1	-	1	-	-	-	2	21	109	12
Iowa	18	2	1	5	-	-	-	8	10	103	35
Missouri	16	-	1	1	2	1	1	6	19	133	60
North Dakota	3	-	1	-	1	-	-	2	7	10	20
South Dakota	1	1	-	-	-	-	-	1	1	3	1
Nebraska	8	-	-	2	1	1	-	4	8	33	15
Kansas	7	-	-	-	-	-	-	-	9	47	13

Table 1 (Continued)

State and Region	Cumulative 1961	Cases Reported to CDC For Week Ending						Six Week Total	Comparable Six Weeks Totals in		
		9/9	9/16	9/23	9/30	10/7	10/14		1960	1959	1958
<b>SOUTH ATLANTIC</b>											
Paralytic	128	6	4	2	7	16	3	38	159	312	153
Total	171	8	8	5	7	19	4	51	182	376	240
Delaware	2	-	-	-	-	-	-	-	-	3	6
Maryland	27	1	1	-	3	1	-	6	87	25	7
D. C.	3	-	-	-	1	-	1	2	2	3	-
Virginia	10	-	1	1	1	-	-	3	15	88	49
West Virginia	24	3	1	3	1	1	1	10	13	82	87
North Carolina	17	-	2	1	-	3	-	6	21	88	23
South Carolina	31	1	3	-	-	14	2	20	28	28	8
Georgia	28	-	-	-	1	-	-	1	9	33	15
Florida	29	3	-	-	-	-	-	3	7	26	45
<b>EAST SOUTH CENTRAL</b>											
Paralytic	42	1	5	2	1	-	2	11	23	187	56
Total	74	3	7	4	4	3	3	24	85	232	89
Kentucky	27	-	2	-	2	3	1	8	54	48	16
Tennessee	17	3	-	3	1	-	-	7	20	117	35
Alabama	9	-	1	-	-	-	-	1	5	44	10
Mississippi	21	-	4	1	1	-	2	8	6	23	28
<b>WEST SOUTH CENTRAL</b>											
Paralytic	70	3	3	3	4	4	2	19	49	145	119
Total	133	6	7	5	9	8	2	37	69	244	170
Arkansas	16	1	-	4	-	-	1	6	12	92	8
Louisiana	45	2	3	-	4	4	1	14	8	24	23
Oklahoma	4	-	-	-	-	1	-	1	8	30	12
Texas	68	3	4	1	5	3	-	16	41	98	127
<b>MOUNTAIN</b>											
Paralytic	24	-	-	-	1	-	-	1	14	28	22
Total	42	2	-	1	1	-	-	4	24	48	50
Montana	3	-	-	-	-	-	-	-	3	-	19
Idaho	14	1	-	1	-	-	-	2	-	1	6
Wyoming	-	-	-	-	-	-	-	-	10	-	2
Colorado	6	-	-	-	-	-	-	-	9	12	7
New Mexico	3	-	-	-	-	-	-	-	1	10	4
Arizona	8	-	-	-	1	-	-	1	-	19	7
Utah	8	1	-	-	-	-	-	1	1	3	4
Nevada	-	-	-	-	-	-	-	-	-	3	1
<b>PACIFIC</b>											
Paralytic	95	5	5	5	5	2	4	26	92	231	79
Total	123	5	7	6	5	5	4	32	105	256	104
Washington	22	1	1	1	-	2	-	5	10	80	12
Oregon	14	1	-	1	1	-	-	3	7	49	9
California	83	3	5	4	3	3	4	22	88	120	69
Alaska	-	-	-	-	-	-	-	-	-	6	1
Hawaii	4	-	1	-	1	-	-	2	-	1	13
<b>TERRITORY</b>											
Puerto Rico	6	-	1	-	-	-	-	1	53	1	-

